

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously presented) A method for isolating progenitor cells having stem-cell-like characteristics from a male or female human body, wherein such cells are isolated directly or indirectly from human mammary secretions comprising colostrum, mature milk, or dry period secretion during at least one time period selected from the group consisting of a non-pregnant period, a pregnant period, a lactating period, and an involuting period.
2. (Previously presented) The method according to claim 1, wherein the progenitor cells are pluripotent or multipotent cells.
3. (Previously presented) A method according to claim 1, wherein said progenitor cells are isolated from an acellular portion of the mammary secretion that is separated from a cellular portion.
4. (Currently amended) A method according to claim 3, wherein non-pluripotent or nonmultipotent cells are removed from the cellular portion of the mammary secretion.
5. (Currently amended) A method according to claim 1, wherein human secretory epithelial cells and leucocytes, and microorganisms are removed from the mammary secretion.
6. (Currently amended) A method according to claim 1, wherein progenitor cells are isolated from mammary secretions isolated during lactating periods wherein said lactating periods are selected from the group consisting of the period after beginning of individual feeding, and the early lactation period.
7. (Previously presented) A method according to any of the preceding claims claim 1, wherein magnet beads are used to isolate the progenitor cells.

8. (Currently amended) A method according to claim 1, wherein in a first step cellular components are washed out of the mammary secretion, in a second step said cellular components are stained with antibodies to the progenitor cell markers, and in a third step the progenitor cells are separated from the other cells directly or indirectly by means of the attached antibodies.

9. (Previously presented) A method according to claim 8, wherein the antibody-stained progenitor cells are attached to beads and the progenitor cells are isolated using said beads, wherein when said beads are small iron beads, said beads are isolated using a magnet, and wherein subsequently the beads or the antibodies or both are removed from the progenitor cells.

10. (Previously presented) A method according to claim 9, wherein the beads are removed using an enzyme is effected by means of enzymes selected from the group consisting of DNase, Proteinase, and RNase.

11. (Previously presented) A method according to claim 1, wherein the progenitor cells are cultured without using a fibroblast feeder layer.

12. (Currently amended) A method according to claim 1, wherein in

(i) a first step the whole human mammary secretion is subjected to centrifugation leaving a fat layer on top, a protein and carbohydrate rich supernatant beneath it, and at the bottom a pellet of cells;

(ii) in a second step the fat fraction and supernatant are removed;

(iii) in a third step a volume of a buffer or cell culture media is added and the cells are resuspended in the buffer or media and centrifuged as in the first step and repeating this step 3 or 4 times, leaving a substantially pure cell pellet; and

(iv) in a fourth step separating the progenitor cells from the cell pellet.

13. (Previously presented) A method according to claim 12, wherein a cell pellet is generated from the human mammary secretion, and thereafter:

(v) the cell pellet is suspended in cell culture media;

(vi) this suspension is incubated for at least 15 minutes at 4°C with progenitor cell-specific or stem-cell-specific antibodies linked to magnetic beads via a small strand of DNA;

(vii) positioning a magnet in proximity to the suspension, whereby cells that have bound to the magnetic beads attract the progenitor cells connected with the beads to the magnet, whereas unbound cells are not attracted by the magnet and remain in the supernatant; and

(viii) removing the supernatant leaving only the progenitor cells bound to the beads via the progenitor cell antibody.

14. (Previously presented) A method according to claim 13, wherein thereafter:

(ix) progenitor cells bound to the beads via the stem cell-specific antibodies removed by a cleavage means, wherein when the antibody is attached to the beads via small strand of DNA, said cleavage means is a DNase,

(x) the beads are removed by positioning the magnet to attract the beads, no longer attached to the stem cells, to it; and

(xi) removing the supernatant containing the isolated progenitor cells.

15. (Previously presented) A method according to claim 1, wherein the cells are separated from human mammary secretion by centrifugation, and subsequently incubated in a growth media that is permissive for growth of progenitor cells, stem cells or lactocyte growth.

16. (Previously presented) A method according to claim 15, wherein in

(i) a first step the unfractionated human mammary secretion is subjected to centrifugation leaving a fat layer on top, a protein and carbohydrate rich supernatant beneath it, and at the bottom a pellet of cells;

(ii) in a second step, the cell pellet is washed in cell culture media;

(iii) in a third step the cells comprising ~~of~~ the cell pellet are plated onto a cell culture vessel in bacteriocidal, fungicidal or both bacteriocidal and fungicidal growth media and incubated for no less than 10 and no more than 30 days and thereafter,

(iv) the cells are harvested and washed using buffer or growth media, and

(v) the harvested cells are plated onto a reconstituted basement membrane preparation.

17. (Previously presented) A method according to claim 16, wherein in step (v) the solubilized basement membrane preparation is extracted from EHS mouse sarcoma.

18. (Previously presented) Pluripotent or multipotent progenitor cells, derived using a method according to claim 1.

19. (Withdrawn) A method for creating cells or tissues in a mother or infant comprising administering to the mother or infant pluripotent or multipotent progenitor cells prepared according to the method of claim 1.

20. (Cancelled)

21. (Withdrawn) A method according to claim 19, further comprising gene therapy treatments or intrauterine foetal treatments.

22. (Withdrawn) A method according to claim 19, wherein the cells or tissues are administered for the treatment of disease.

23. (Cancelled)

24. (Withdrawn) A method of claim 19, wherein the cells or tissues are administered for diagnosis, bioengineering, lactoengineering, breast tissue regeneration, breast reconstructive surgery, breast cosmetic or enhancement surgery, exocrine gland tissue regeneration and/or surgery.